

AMENDMENTS TO THE SPECIFICATION

Please amend the specification to accommodate the following corrections:

Please replace paragraph [0002] with the following corrected paragraph:

A1 [0002] The present invention relates to satellite communication systems. In particular, the present invention relates to a satellite communications system that employs highly agile spot beams to provide bandwidth for terrestrial communication targets.

Please replace paragraph [0004] with the following corrected paragraph:

A2 [0004] The energy in even a relatively narrow 3.5 degree beam spot is distributed over a large area. The distribution of energy, while providing much higher gain than an LGEC antenna, nevertheless imposes a significant bandwidth limitation on the uplink and downlink. Thus, in the past, the beam spots provided throughput on the order of 75 bps to 2.4 kbps. As the number of communication targets increases, and as those communication targets disperse geographically, the cost and complexity required to support the communication targets increase dramatically (and may be quite wasteful, if, for example, an entire beam spot is required for a single remote communication target).

Please replace paragraph [0008] with the following corrected paragraph:

A3 [0008] Because the beam spot is typically assigned to a single communication target, the beam spot may be narrower (e.g., between 0.9 and 3.5 degrees in angular diameter) and provides commensurately higher gain. In turn, the communication target may transmit (or receive) at a higher instantaneous burst bit rate, and thus a predetermined access schedule may support an increased number of communication targets. When the access schedule is a fixed length time division multiplexed frame, for example, the frame may include additional time slots individually assigned to communication targets over that available in prior systems.

Please replace paragraph [0029] with the following corrected paragraph:

A4 [0029] Once the communication target has acquired the downlink signal and processed the orderwire message from the satellite, the communication target may select an available uplink probe access for its beam spot. The communication target proceeds to transmit an uplink acquisition probe signal during the time interval associated with the selected probe access.

Please replace paragraph [0035] with the following corrected paragraph:

A5 [0035] Figure 5 illustrates a second example of a communication path processing system 500. The processing system 500 includes a four beam phased array 502, a switch 504, and downconverters (e.g., the downconverter 506) shown connected to five of the eight switch outputs. The downconverters are in turn coupled to the demodulator bank 5068, and in particular, individual demodulators such as the demodulator 510.